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Valid publication of the names *Caecibacterium* and *Caecibacterium sporoformans*

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Abstract

Descriptions of the genus *Caecibacterium* and its proposed type species *Caecibacterium sporoformans* were published in the IJSEM by Onrust *et al.* (*Int J Syst Evol Microbiol* 2017;67:4589–4594). The type strain was deposited as LMG 27730 and DSM 26959. DSM 26959 is a patent strain, and therefore the names were effectively, but not validly, published based on Rule 30 (4) of the International Code of Nomenclature of Prokaryotes. The type strain of *C. sporoformans* is now available from the Deutsche Sammlung von Mikroorganismen und Zellkulturen as DSM 103070 and no restrictions have been placed on its distribution. We here present new descriptions of the genus and its type species so that the names can be validly published.

When the names *Caecibacterium* gen. nov. with *Caecibacterium sporoformans* sp. nov. as the proposed type species were published [1], the type strain of the type species was available without restriction from the BCCM/LMG culture collection as LMG 27730. In addition, the strain was deposited as a patent strain in the Deutsche Sammlung von Mikroorganismen und Zellkulturen (DSMZ) as DSM 26959. The List Editors of the IJSEM added a footnote in the Notification List for volume 67, part 11, stating that the names *Caecibacterium* gen. nov. (Onrust *et al.* 2017, 4593) and *Caecibacterium sporoformans* sp. nov. (Onrust *et al.* 2017, 4593), as published, contravene Rule 30(4) of the International Code of Nomenclature of Prokaryotes [2], and therefore are not validly published [3].

The proposed type strain of *Caecibacterium sporoformans* is now available from the DSMZ without restrictions as DSM 103070. Therefore, we here present new descriptions of the genus and its type species so that the names will become validly published from the date of publication of this paper.

DESCRIPTION OF *CAECIBACTERIUM* GEN. NOV.

Caecibacterium [Cae.ci.bac.te′ri.um. N.L. neut. n. *caecum* (from L. adj. *caecus* blind) caecum; N.L. neut. n. *bacterium* a small rod; N.L. neut. n. *Caecibacterium* a rod from the caecum].

The members of this genus are Gram-stain-negative, non-motile, spore-forming rods. Obligate anaerobic growth occurs at a mesophilic to thermophilic temperature range at a pH range from 6.0 to 9.0. Mono- and disaccharides are fermented. The strains produce butyrate and acetate, and consume propionate and lactate in RCM broth. The DNA G+C content is low at 32.5–36.4 %. This novel genus is classified in the phylum *Firmicutes*, class *Clostridia*. The type species is *Caecibacterium sporoformans*.

DESCRIPTION OF *CAECIBACTERIUM SPOROFORMANS* SP. NOV.

Caecibacterium sporoformans (spo.ro.for′mans. Gr. n. *spora* a seed; L. pres. part. *formans* that gives shape, form; N.L. part. adj. *sporoformans* spore-forming).

Gram-stain-negative, strictly anaerobic, endospore-forming and rod-shaped. Metabolizes glucose, lactose, maltose, trehalose and xylose. Negative for hydrolysis of urea and gelatin, negative for nitrate reduction and positive for aesculin hydrolysis. Produces butyrate and acetate and consumes propionate and lactate. The DNA G+C content is low at

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Abbreviation: BCCM/LMG, Belgian Co-ordinated Collection of Micro-organisms/Laboratory of Microbiology Ghent.

32.5–36.4 %. The fatty acid profile is dominated by $C_{16:0}$ and $C_{14:0}$, followed by $C_{19:0\ CYC\ 9,\ 10\ DMA}$, $C_{18:1\ CIS\ 9\ DMA}$, $C_{18:1}$ and $C_{16:0\ DMA}$.

The type strain is LMG 27730^T (=DSM 103070^T), isolated from the caecal content of a 4-week-old broiler chicken in Ghent (Belgium) in 2007.

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Conflicts of interest
The authors declare that there are no conflicts of interest.

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